

Dr. CHAITRA C

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Education

	Degree	Year	Institute	Specialization
1	BE	2006	Siddaganga Institute of Technology, Tumkur	Instrumentation Technology
2	M.Tech	2013	Siddaganga Institute of Technology, Tumkur	Power Electronics
3	Ph.D	2024	Siddaganga Institute of Technology, Tumkur	Thin film sensor development

Professional Experience

	Date (from-to)	Designation	Organization
1	01-08-2008 to till date	Assistant Professor	SIT, Tumkur

Positions held

- Co-ordinator for Departmental BoS
- Co-ordinator for Departmental BoE
- Co-ordinator for Departmental Academic Affairs Committee
- Co-ordinator for Technical Seminar
- Co-ordinator for Industrial Training/Field Training
- Co-ordinator for ISO Audit
- Co-ordinator for Academic Audit
- Department Test Co-ordinator
- Department Mini-Project Co-ordinator
- Department Time table Co-ordinator
- Department Process Automation Laboratory Faculty In-charge

Affiliations of Professional organizations

- The Institution of Engineers (Associate Membership in IEI)

Awards and Honors

- Awarded Gold medal for securing 1st Rank in M.Tech (Power Electronics) from SIT, Tumkur affiliated to VTU, Belagavi.
- Top performer of the programme of AICTE approved 4 week FDP on 'Use of ICT in Education for Online and Blended Learning conducted by IIT, Bombay from 2nd May to 10th July 2016.
- Awarded Silver with Elite medal for successful completion of NPTEL course on Transducer for Instrumentation (75%) and Educational Technology and ICT (75%)
- Awarded Elite medal for successful completion of NPTEL course on Sensors and Actuators (65%)

Courses Taught

Undergraduate Courses

- Electrical & Electronic Measurements
- Transducers & its applications
- Network Analysis
- Control Systems
- Process Control Systems
- Analytical Instrumentation
- Analog and Digital Communication
- Advanced Control Systems
- Power Electronics
- Process Automation
- Industrial Communication
- Industrial Instrumentation
- Computational Methods
- Aircraft Instrumentation

Postgraduate Courses

NIL

Research Guidance

Sl. no	Name of the Scholar	Title	Year of completion
	Nil	Nil	Nil

Research Areas

- Thin film sensor
- Electronics and Instrumentation

Sponsored Projects

Ongoing Projects: Nil

1. Title:
Funding Agency:
Amount:
Duration:
Role:

Completed Projects: Nil

1. Title:
Funding Agency:
Amount:
Duration:
Role:

Publications

Journals

- C. Chaitra, H. Kalpana, H. Lalithamba, and C. Ananda, "Structural, Optical and Electrical Properties of ATO Nanoparticles Synthesized by Combustion Method", *jmmf*, vol. 70, no. 8A, pp. 228–232, Dec. 2022.
- C.Chaitra, H.M. Kalpana, C.M. Ananda & H.S. Lalithamba (2022) Green synthesis of tin oxide based nanoparticles using Terminalia bellirica seed extract: impact of operating temperature and antimony dopant on sensitivity for carbon dioxide gas sensing application, *Materials Technology*, 37:12, 2339-2346.
- Chandraiah, C.; Kalpana, H.; Ananda, C.; Kulkarni, M. Preparation of Antimony Tin Oxide Thin Film Using Green Synthesized Nanoparticles by E-Beam Technique for NO₂ Gas Sensing. *Micro* 2024, 4(3), 401-411; <https://doi.org/10.3390/micro4030025>
- C. Chaitra, H. M. Kalpana, C. M. Ananda, and H. S. Lalithamba, "Synthesis of Tin oxide Nanoparticles Using Combustion Method for gas sensing applications," *Journal of the Instrument Society of India*, Vol.50, No. 1-4, pp. 119–125, December 2022.

Conference Proceedings

- C. Chaitra, H. M. Kalpana, C. M. Ananda and H. S. Lalithamba, "Dielectric Properties of Green Synthesized Sb:SnO₂ Nanoparticles," *2023 International Conference on Smart Systems for applications in Electrical Sciences (ICSSES)*, Tumakuru, India, 2023, pp. 1-4, doi: 10.1109/ICSSES58299.2023.10201159.
- R. T K and C. Chaitra, "Innovative Solutions for Plant Care: An Automatic Water Pump System," *2024 10th International Conference on Electrical Energy Systems (ICEES)*, Chennai, India, 2024, pp. 1-4, doi: 10.1109/ICEES61253.2024.10776862.
- B. S. Rajeshwari and C. Chaitra, "Smart Safety System for Lineman," *2024 International Conference on Smart Systems for applications in Electrical Sciences (ICSSES)*, Tumakuru, India, 2024, pp. 1-4, doi: 10.1109/ICSSES62373.2024.10561286.
- N. Fathima, V. G. Thanuja, H. K. Manya Krishna, S. Banu, H. M. Kalpana and C. Chaitra, "A Systematic Investigation into WO₃ Nanoparticles in Pellet Form for Gas Sensing Applications," *2024 International Conference on Smart Systems for applications in Electrical Sciences (ICSSES)*, Tumakuru, India, 2024, pp. 1-5, doi: 10.1109/ICSSES62373.2024.10561367.
- C. Chaitra, "Preparation and Characterization of SnO₂:V₂O₅ Nanocomposite Thin Film for Gas Sensing Application," *2025 3rd International Conference on Smart Systems for applications in Electrical Sciences (ICSSES)*, Tumakuru, India, 2025, pp. 1-4, doi: 10.1109/ICSSES64899.2025.11010073.
- Chaitra C, Kalpana H.M, Lalithamba H.S and Ananda C.M, "Structural, optical and electrical properties of ATO nanoparticles synthesised by combustion method for gas sensing application" in International Conference on Recent Developments in Mechanical Engineering (ICRDME-2022) organized by Siddaganga Institute of Technology from 24th to 25th June 2022.
- C. Chaitra, H. M. Kalpana, C. M. Ananda, and H. S. Lalithamba, "Synthesis of Tin oxide Nanoparticles Using Combustion Method for gas sensing applications" in National Symposium on Instrumentation (NSI-42) organized by Instrument Society of India (ISOI), Indian Institute of Science, Bangalore on 28th and 29th December 2020.

Book Chapters

- Nil

Books

- Nil

Editorial

- Nil

Reviewer of Journals

- Nil

Editor/ Reviewer of Journal

- Nil

Patents

- Nil

Invited Lectures, talks and workshops

Invited talk

- Resource person for Gas Sensors: Design and Implementation organized by BMSCE IEEE PES and sensors Council in collaboration with IEEE Women in Sensors on 18th November 2024.
- Mentor in the AICTE approved FDP on “Foundation Program in ICT for Education” conducted by IIT, Bombay from 3rd August to 7th September 2017.
- Mentor in the AICTE approved FDP on “Pedagogy for online and Blended teaching-learning process” conducted by IIT, Bombay from 14th September to 12th October 2017.